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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,774	08/22/2001	Ronald Gary Godsey	8231	8938
27752 7590 09/19/2007 THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION - WEST BLDG. WINTON HILL BUSINESS CENTER - BOX 412 6250 CENTER HILL AVENUE CINCINNATI, OH 45224				
			EXAMINER SHAAWAT, MUSSA A	
			ART UNIT 3627	PAPER NUMBER
			MAIL DATE 09/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/935,774

**Applicant(s)**

GODSEY ET AL.

**Examiner**

Mussa A. Shaawat

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is in response to amendment filed on August 03, 2007. Claims 1-11 and 36 have been cancelled. Claims 12-14, 17-19, 21-23, 26 and 33 have been amended. Claims 12-35 are pending examination.

### ***Response to Arguments***

2. Applicant's arguments have been fully considered but are not persuasive. In particular the applicant argues, A) neither Gupta nor DeTemple teach or suggest using Radio Frequency identification tags on the products and sensors sensing these tags; B) applicant is traversing what the examiner cited for claim 25, which states "presenting a virtual store environment having a plurality of virtual store parameters associated therewith corresponding to the real store parameters..."

In response to A), the examiner respectfully disagrees. Applicant is reminded that claims must be given their broadest reasonable interpretation. DeTemple teaches a method that permits a store computer to identify the zone in which movable items are located (i.e. products placing into or removed); also Walker states "rather than have the unique addresses take the form of a transceiver address field that carries binary identifiers, they could be radio frequency carriers on which the information (price and/or location address) ..." i.e using radio frequency tags and sensors sensing these tags, furthermore see (col.10 lines 1-10). Therefore Gupta in view of Detemple still meets the scope of the limitation as currently claimed.

In response to B), applicant is reminded that claims must be given their broadest reasonable interpretation. Examiner has cited particular columns and line numbers in

the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner. Having said that, DeTemple discloses tracking the path taken by the customer while shopping via attaching a tracking transmitter to a shopping cart, a shopping basket or a customer (see col.9 lines 10-15), see also fig. 2 and fig.6 for virtual store parameters and real store parameters such as shelves, cashiers, items/products and carts. In addition, the structure of claims 14, 15 and 25, which depend from a method claim, carry little patentable weight. Therefore DeTemple still meets the scope of the limitation as currently claimed.

3. Note: Claim 14 describes an apparatus, which depends from a method claim 12, the amendment to claim 14 now further limit the claims, however claim 14 describes an apparatus, therefore the 112 2<sup>nd</sup> rejection is maintained.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claim 14-15 and 25 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 14 describes an apparatus, yet it is dependent from a claim 12, which is a method claim. In addition claim 14, which depends from 12, does not further limit the steps of method claim 12.

Claims 15 and 25 are rejected because they depend from a rejected claim.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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**8. Claims 12-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al., US Patent No. (6,820,062) referred to hereinafter as Gupta in view of DeTemple et al., US Patent No. (5,572,653) referred to hereinafter as DeTemple.**

As per claim 12, Gupta teaches a computer-implemented method for determining an effect of changing an environment parameter in a store environment, comprising: generating a first plurality of product container tracks through the store environment, each of the first plurality of product container tracks are followed by each of a first plurality of product containers to a point-of-sale location before one or more store environment parameters is changed; generating a second plurality of product container tracks through the store environment, each of the second plurality of product container tracks are followed by each of a second plurality of product containers to a point-of-sale location after the one or more store environment parameters is changed; and analyzing the first and second plurality of product container tracks and the first and second plurality of product tracks to determine relationships between the one or more store environment parameters and the effect (see col.12 lines 37-58).

However Gupta does not expressly teach *using a Radio Frequency identification tags (RFID) on the product when it is placed into or removed from the product container and sensors sensing said tags.*

DeTemple teaches *using a Radio Frequency identification tags (RFID) on the product when it is placed into or removed from the product container and sensors sensing said tags (col.9 lines 45-65).*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of DeTemple into the disclosure of Gupta, in order to accurately and effectively communicate data to central computer for the purpose of analyzing and measuring the path taken by the consumer from initial stage to end-stage (POS terminal).

In addition Gupta does not expressly teach that the tracks are being representative of a continuous path. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the above limitation into the disclosure of Gupta in order to accurately and efficiently analyze the behavior of a consumer inside a store.

As per claim 13, Gupta teaches a method of claim 12 wherein analyzing the first and second plurality of product container tracks, or the first and second plurality product tracks comprises determining one or more coefficients using regression analysis to analyze selected ones of the first and second plurality of tracks, each coefficient representing a relationship between one of the store environment parameters and one of the one or more of the effects, (see col.12 lines 53-58).

As per claim 16 Gupta teaches a method of claim 12 wherein the store environment parameters comprise at least one of signage, end cap position, position of special promotion areas, position and type of informational kiosks, store-within-a-store areas, shelf configuration, lighting, flooring, scents, aisle length, aisle orientation, and aisle configuration, (see col.12 lines 53-58).

As per claim 17-19, Gupta teaches wherein plurality of tracks is determined with reference to whether the track begins within a starting region in the store environment, (see col.11 lines 23-25).

However, Gupta does not expressly teach determining validity of each of the first and second plurality of tracks before analyzing the first and second plurality of tracks; wherein the validity of each of the first and second plurality of tracks is determined with reference to whether the track includes any idle periods greater than a programmable time period. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the above limitations into the disclosure of Gupta in order to obtain an accurate measurement of customer's path.

Re: claim 20, Gupta teaches a method of claim 12 wherein the effect comprises sales of a particular item, (col.12 lines 55-58).

Re: claim 21, Gupta teaches a method of claim 12 wherein the first and second plurality of product tracks are analyzed with reference to point-of-sale data generated at the point-of-sale location, (see at least, col.11 lines 5-8 and col. 12 lines 37-40).

Re: claim 22, Gupta teaches a method of claim 12 wherein the first and second plurality of product tracks are analyzed with reference to product placement data correlating particular products with physical locations in the store environment, (col.12 lines 45-58).

As per claim 23, Gupta teaches a method of claim 12 further comprising using heat signature data to generate at least some of the first and second pluralities of product tracks, (see at least col.1 lines 30-36).



As per claim 24, claim 24 is a computer program of claim 12, therefore it is rejected based on the same rationale.

As per claim 14-15 and 25, Gupta teaches a method wherein the tracking system comprises: the product containers; a plurality of identification tags each of which is associated with and uniquely identifies one of the product containers (see col.2 lines 10-17);

However, Gupta does not expressly teach *a plurality of sensors in the store environment each of which has a region associated therewith within which the identification tags are detected*, at least one of the plurality of sensors having within its associated region the point-of-sale location; and *a processor configured to receive location data from the plurality of sensors and generate the product container tracks therefrom*; wherein the plurality of identification tags comprises active transmitters and the plurality of sensors comprises passive sensors for detecting radiation from the transmitters; presenting a virtual store environment having a plurality of virtual store parameters associated therewith corresponding to the real store parameters, the virtual store environment being characterized by virtual store effects which are determined using the virtual store parameters and the relationships between the plurality of real store parameters and the plurality of real store effects. *In addition Gupta does not expressly teach Radio Frequency Identification tags on products.*

DeTemple teaches a plurality of sensors in the store environment each of which has a region associated therewith within which the identification tags are detected, at least one of the plurality of sensors having within its associated region the point-of-sale

location; and a processor configured to receive location data from the plurality of sensors and generate the tracks therefrom (see col. 7 lines 47-65); wherein the plurality of identification tags comprises active transmitters and the plurality of sensors comprises passive sensors for detecting radiation from the transmitters (see col.9 lines 2-21); presenting a virtual store environment having a plurality of virtual store parameters associated therewith corresponding to the real store parameters, the virtual store environment being characterized by virtual store effects which are determined using the virtual store parameters and the relationships between the plurality of real store parameters and the plurality of real store effects, (see fig.2). In addition DeTemple teach Radio Frequency Identification tags on products (see col.9 lines 45-65).

It would have been obvious to one of ordinary skill in the art to incorporate the teaching of the above limitations into Gupta's disclosure in order to accurately and effectively communicate data to central computer for the purpose of analyzing and measuring the path taken by the consumer from initial stage to end-stage (POS terminal). Furthermore the structure of claims 14, 15 and 25, which depend from a method claim, carry little patentable weight.

As per claim 33, Gupta teaches a computer-implemented method for simulating a store environment using consumer tracking data, the consumer tracking data comprising a first plurality of tracks through a real store environment, each of the first plurality of tracks are followed by each of a first plurality of product containers to a point-of-sale location before a plurality of real store parameters is changed, and a second plurality of tracks through the real store environment, each of the second plurality of

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tracks are followed by each of a second plurality of product containers to the point-of-sale location after the plurality of real store parameters is changed (see col.12 lines 37-58).

Gupta does not expressly teach presenting a virtual store environment having a plurality of virtual store parameters associated therewith corresponding to the real store parameters, the virtual store environment being characterized by virtual store effects which are determined using the virtual store parameters and the relationships between the plurality of real store parameters and the plurality of real store effects.

DeTemple teach presenting a virtual store environment having a plurality of virtual store parameters associated therewith corresponding to the real store parameters, the virtual store environment being characterized by virtual store effects which are determined using the virtual store parameters and the relationships between the plurality of real store parameters and the plurality of real store effects, (see fig.2).

It would have been obvious to one of ordinary skill in the art to incorporate the teaching of the above limitations into Gupta's disclosure in order to accurately and effectively communicate data to central computer for the purpose of analyzing and measuring the path taken by the consumer from initial stage to end-stage (POS terminal).

In addition Gupta does not expressly teach that the tracks are being representative of a continuous path. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the above limitation into

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the disclosure of Gupta in order to accurately and efficiently analyze the behavior of a consumer inside a store.

9. Re: Claims 26-32, and 34-35, the limitations of claims 26-32 and 34-35 are similar to the limitations of claims 12-13 and 16-24, therefore they are rejected based on the same rationale.

**Contact Information**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mussa A. Shaawat whose telephone number is 571-272-2945. The examiner can normally be reached on Mon-Fri (8am-5:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mussa Shaawat  
Patent Examiner  
September 11, 2007

 9/14/07  
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